

REMARKS/ARGUMENTS

The claims are 2, 3, 6-15 and 17-30. Claims 15 and 30 have been amended to better define the invention, and claim 13 has been amended to correct a clerical error. Support for the claims may be found, *inter alia*, in the disclosure at page 3, fourth full paragraph, the paragraph bridging pages 11-12, page 13, last paragraph, and FIG. 10. Reconsideration is expressly requested.

Claims 15, 17-20, 23-24 and 28-29 were rejected under 35 U.S.C. §102(b) as being anticipated by *Jank et al. U.S. Patent No. 6,476,354*. Claims 21-22 and 25-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Jank et al.* in view of *Hsu U.S. Patent No. 6,717,107* (claim 21), *Tanaka et al. U.S. Patent No. 4,100,389* (claims 22 and 25), *Norrish et al. U.S. Patent Application Publication No. 2002/0008095* (claim 26), or *Plottier et al. U.S. Patent No. 6,384,376* (claim 27).

Claims 30, 2 and 6-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Artelsmair WO 00/64620* in view of *Hsu*. Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Artelsmair* in view of *Hsu* and further in view of *Norrish et al.*

In response, Applicant has amended claims 15 and 30 to better define the invention and respectfully traverses the Examiner's rejection for the following reasons.

As set forth in claims 15 and 30 as amended, Applicant's invention provides a welding device and a method in which two welding process phases (a first welding process phase having a high energy input and a second welding process phase having a low energy input) are combined to enable the adjustment and/or control of the heat balance for the introduction of heat into the workpiece. To adjust and/or control the heat balance for the introduction of heat into the workpiece, the ratio of the different welding process phases, i.e. the number of pulses in a welding phase, will be varied as a function of the required heat input. With a larger sheet thickness of the workpiece, for instance, a ratio can be changed such that the welding process phase having a higher energy input is adjusted accordingly higher than with a workpiece having a smaller thickness. Thus, with Applicant's method and apparatus as recited in claims 15 and 30 as amended, the ratio of the welding process phases can be adjusted, i.e. the number of pulses of the first welding process phase to the number of pulses of the second welding process phase as discussed at pages 3 and 11-13 of Applicant's disclosure. See

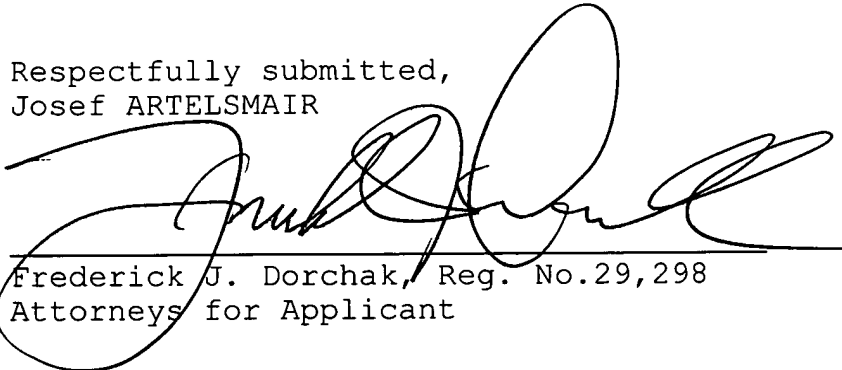
also FIG. 10 showing control knob 48 with an appropriate scale to allow the user to adjust a heat input by simple selection. The control device 4 controls the ratio of the welding method having a low energy input to the welding method having a high energy input.

None of the cited references discloses or suggests a welding method or apparatus wherein the ratio of the number of pulses of a welding process phase with high energy input and the number of pulses of a welding process phase with low energy input is adjusted in dependency of an adjusted power or heat input. Accordingly, it is respectfully submitted that claims 15 and 30 as amended are patentable over the cited references, together with claims 2-3 and 6-14 which depend on claim 30 as amended and claims 17-29 which depend directly or indirectly on claim 15 as amended.

In summary, claims 13, 15 and 30 have been amended. In view of the foregoing, it is respectfully requested that the claims be allowed and that this application be passed to issue.

Respectfully submitted,
Josef ARTELSMAIR

COLLARD & ROE, P.C.
1077 Northern Boulevard
Roslyn, New York 11576
(516) 365-9802



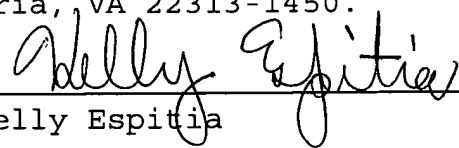
Frederick J. Dorchak, Reg. No. 29,298
Attorneys for Applicant

FJD:cmm

EXPRESS MAIL NO. EM 467 458 350 US

Date of Deposit: April 5, 2010

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10, on the date indicated above, and is addressed to the MAIL STOP RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Kelly Espitia

R:\Patents\ARTELSMAIR 6 PCT\RCE\Preliminary Amendment in RCE.wpd